

Technical Data Sheet

Compressor model **MPT14LD**
Voltage **115V 60Hz ~1**
Refrigerant **R404A**

APPLICATION

Application Low Back Pressure
Refrigerant R404A
Evaporating Temp. -40,0 °C to -10,0 °C
Expansion Capillar/Valve
Comp. Cooling Fan cooled
Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 14,32 cm³
Diameter 29,37 mm
Stroke 21,13 mm
Net Weight 12,20 Kg
Oil type ISO VG 32 ESTER
Oil charge 400 cm³

MOTOR

Nominal Power 1/2 hp
Voltage/Frequency 115V 60Hz
Voltage range 98-127 V
Type CSR
Phase number 1 PH
Locked Rotor Amps (LRA) 46,00 A
Max. Cont. Current (MCC) 10,00 A
Main W. resist. at 25°C 0,89 Ω
Start W. resist. at 25°C 4,55 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	746 kCal/h	590 W
COP	1,35 W/W	0,96 W/W
EER	1,16 kCal/Wh	0,83 kCal/Wh
Input Power	643 W	615 W
Current	6,38 A	6,16 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V			
Run capacitor	25 µF 250 V			
Relay	Option 1	Option 2		
Reference	2014 191. + NTC3I©	QLZ-24.4A + NTC3I©		
Pick-Up	24,40 A	24.4 A		
Drop-Out	20,30 A	20.3 A		
Protector	Option 1			
Reference	T0257			
Current	24,00 A			
Time check	6,0-16 seg			
Disc temp. (Open/Close)	120,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	354	414	4,70	0,99	0,85
40	-35	459	458	5,01	1,17	1,00
40	-30	596	510	5,38	1,36	1,17
40	-25	764	570	5,82	1,56	1,34
40	-23,3	828	592	5,98	1,63	1,40
40	-20	963	637	6,33	1,76	1,51
40	-15	1.193	711	6,93	1,95	1,68
40	-10	1.455	793	7,61	2,13	1,84

45	-40	335	410	4,68	0,95	0,82
45	-35	438	461	5,03	1,11	0,95
45	-30	572	519	5,44	1,28	1,10
45	-25	738	585	5,93	1,47	1,26
45	-23,3	801	609	6,11	1,53	1,32
45	-20	934	658	6,50	1,65	1,42
45	-15	1.161	738	7,15	1,83	1,57
45	-10	1.420	826	7,90	2,00	1,72

50	-40	317	407	4,65	0,91	0,78
50	-35	417	464	5,05	1,05	0,90
50	-30	548	528	5,51	1,21	1,04
50	-25	711	600	6,04	1,38	1,19
50	-23,3	773	626	6,25	1,44	1,24
50	-20	905	679	6,67	1,55	1,33
50	-15	1.130	766	7,38	1,72	1,48
50	-10	1.386	860	8,20	1,87	1,61

55	-40	298	403	4,63	0,86	0,74
55	-35	396	466	5,06	0,99	0,85
55	-30	525	537	5,57	1,14	0,98
55	-25	685	615	6,16	1,29	1,11
55	-23,3	746	643	6,38	1,35	1,16
55	-20	876	700	6,84	1,45	1,25
55	-15	1.098	793	7,61	1,61	1,38
55	-10	1.351	893	8,50	1,76	1,51

60	-40	280	400	4,61	0,81	0,70
60	-35	375	469	5,08	0,93	0,80
60	-30	501	546	5,64	1,07	0,92
60	-25	658	630	6,28	1,22	1,04
60	-23,3	719	660	6,52	1,27	1,09
60	-20	846	721	7,01	1,36	1,17
60	-15	1.066	820	7,85	1,51	1,30
60	-10	1.317	927	8,81	1,65	1,42

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	374	414	4,70	0,91	0,78
40	-35	504	458	5,01	1,10	0,95
40	-30	660	510	5,38	1,29	1,12
40	-25	842	570	5,82	1,48	1,28
40	-23,3	910	592	5,98	1,54	1,33
40	-20	1.051	637	6,33	1,65	1,43
40	-15	1.285	711	6,93	1,81	1,56
40	-10	1.545	793	7,61	1,95	1,68

45	-40	335	410	4,68	0,82	0,71
45	-35	450	461	5,03	0,98	0,84
45	-30	591	519	5,44	1,14	0,98
45	-25	758	585	5,93	1,30	1,12
45	-23,3	821	609	6,11	1,35	1,16
45	-20	951	658	6,50	1,45	1,25
45	-15	1.170	738	7,15	1,59	1,37
45	-10	1.415	826	7,90	1,71	1,48

50	-40	297	407	4,65	0,73	0,63
50	-35	396	464	5,05	0,85	0,74
50	-30	522	528	5,51	0,99	0,85
50	-25	674	600	6,04	1,12	0,97
50	-23,3	731	626	6,25	1,17	1,01
50	-20	852	679	6,67	1,25	1,08
50	-15	1.056	766	7,38	1,38	1,19
50	-10	1.286	860	8,20	1,50	1,29

55	-40	258	403	4,63	0,64	0,55
55	-35	342	466	5,06	0,73	0,63
55	-30	453	537	5,57	0,84	0,73
55	-25	590	615	6,16	0,96	0,83
55	-23,3	642	643	6,38	1,00	0,86
55	-20	752	700	6,84	1,07	0,93
55	-15	941	793	7,61	1,19	1,03
55	-10	1.156	893	8,50	1,29	1,12

60	-40	219	400	4,61	0,55	0,47
60	-35	288	469	5,08	0,61	0,53
60	-30	384	546	5,64	0,70	0,61
60	-25	505	630	6,28	0,80	0,69
60	-23,3	553	660	6,52	0,84	0,72
60	-20	653	721	7,01	0,91	0,78
60	-15	827	820	7,85	1,01	0,87
60	-10	1.027	927	8,81	1,11	0,96

EN12900

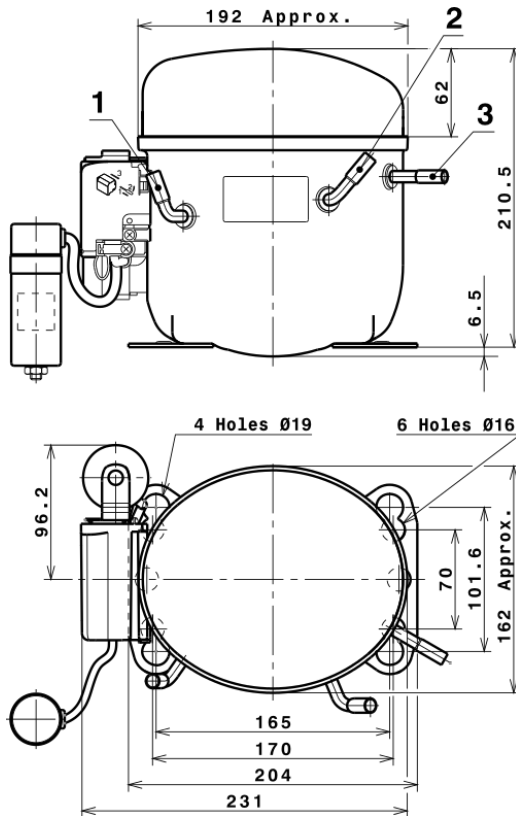
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.390,6550472393	629,9835121887	6,1901096781	70,09485468991
2	87,6317963810	10,6978951461	0,1083788192	2,1759665527242
3	-32,9428214926	9,4116453574	0,0845006620	-0,24106291990462
4	0,4934867516	0,1557547247	0,0019384569	0,019341243319931
5	-0,6279928115	0,2531786020	0,0022336193	-0,0034167982803155

Equation

$$x_1 + x_2 Te + x_3 Tc + x_4 Te^2 + x_5 Te Tc$$

Technical Data Sheet

COMPRESSOR DIMENSIONS

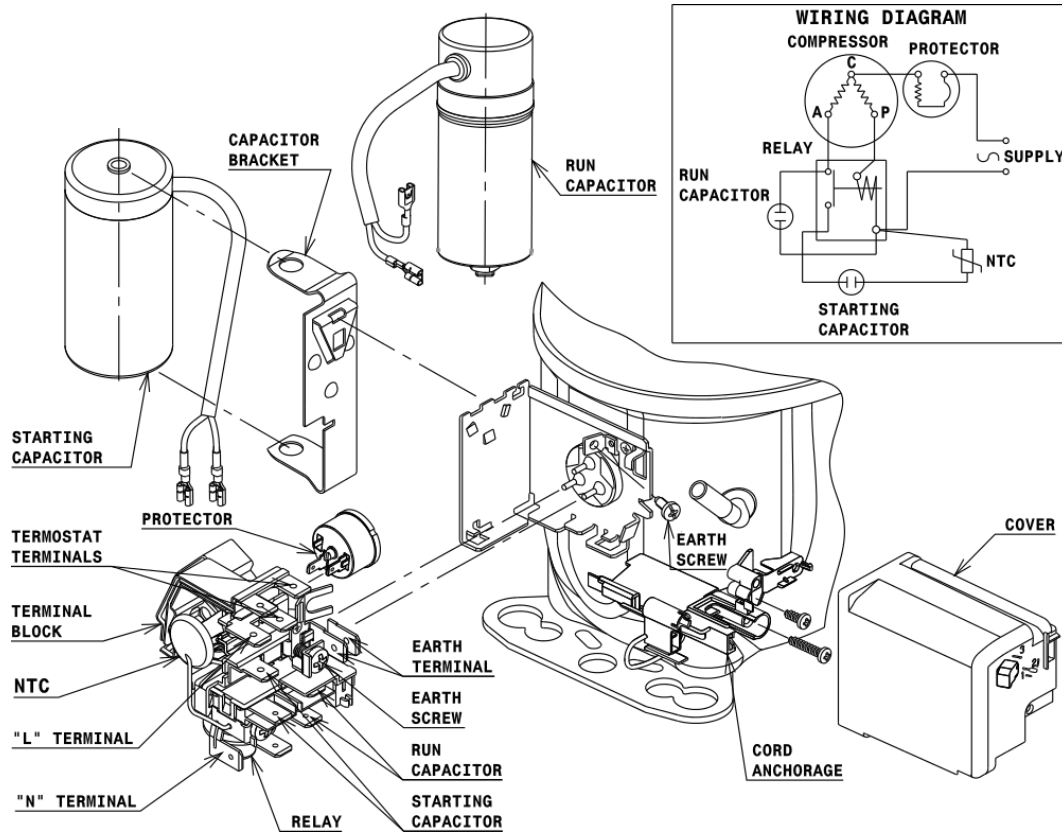


DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

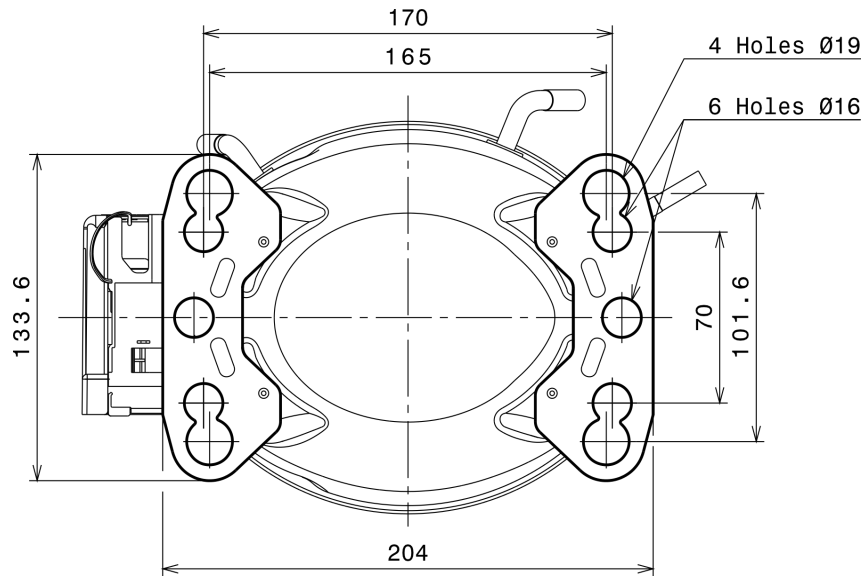
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



Technical Data Sheet

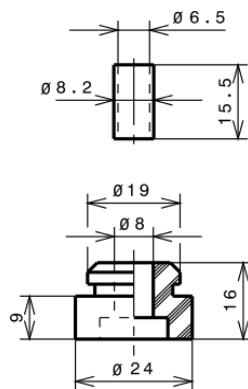
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

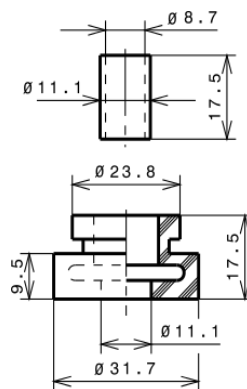
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A LBP

